



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,931	01/26/2004	Wei-Chih Lai	ADTP0103USA	1930
27765	7590	09/22/2006	EXAMINER HODGES, MATTHEW P	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			ART UNIT 2879	PAPER NUMBER

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,931

Applicant(s)

LAI ET AL.

Examiner

Matt P. Hodges

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/10/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US 6,664,137) in view of Babuka et al. (US 2002/0008809) and further in view of Harvey et al. (US 5,771,562).

Regarding claim 1, Weaver discloses (see figure 1b) an organic light-emitting device including a first substrate (110), a passivation layer (120) formed over the first substrate, an organic light emitting device (140), a top cap (150), and an adhesive (130) between the cap and the bottom substrate. The top cap includes a flat top portion and a side portion directed towards the bottom substrate. Weaver does not appear to disclose the removal of the passivation layer under the top cap before attaching the cap to the substrate, however Babuka, in the same field of endeavor, discloses the removal of the moisture prevention layer before adhesion of a protective plate in order to advantageously improve adhesion and mechanical strength. (Paragraph 0071 and 0076). Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the removal of the underlying moisture prevention layer as taught by Babuka into the device as disclosed by Weaver in order to advantageously improve adhesion and mechanical strength.

Weaver in view of Babuka discloses the device as claimed, but does not appear to specify the use of a moisture prevention layer that further encompasses the entire OLED element.

However Harvey, in the same field of endeavor, discloses (see figure 2) the use of a passivation layer both above and below the organic elements. The use of a passivation layer above and below the organic elements advantageously provides additional moisture protection for the organic elements thus increasing device lifespan. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the use of a passivation layer both above and below the organic elements as taught by Harvey into the device as disclosed by Weaver in view of Babuka in order to advantageously increase device lifespan.

Regarding claim 8, Weaver in view of Babuka and further in view of Harvey disclose the manufacture of the device as claimed. Further Harvey specifies that the removal of the passivation layer is performed through an etch of the preformed passivation layer. (Paragraph 0076).

Regarding claims 2, 3, 9, and 10, Weaver discloses the use of glass for both the cap and the substrate. (Column 3 lines 55-57 and Column 6 lines 44-48).

Regarding claims 4, 5, 11, and 12, Weaver further discloses the use of a curable epoxy for the sealing agent. (Column 5 lines 43-47).

Regarding claim 13, the step of curing the curable epoxy is necessitated by the use of the specified material.

Regarding claims 6 and 14, Weaver discloses a multilayer structure for the underlying passivation layer. (Column 4 lines 15-29). Further the combination of the upper layer taught by Harvey to the lower layer disclosed by Weaver results in a multilayer stack.

Art Unit: 2879

Regarding claims 7 and 15, both Weaver and Harvey disclose the use of Silicon Oxides for the passivation layer. (Weaver – Column 4 lines 45-55, Harvey – Column 2 lines 50-55).

Response to Arguments

Applicant's arguments filed 6/21/2006 have been fully considered but they are not persuasive.

Regarding applicant's assertion that the technique of selectively etching the passivation layer in order to enhance adhesion between substrates taught by Babuka is not analogous to the art of EL devices, the examiner respectfully disagrees. Babuka specifically discloses that the sealing methods disclosed are applicable not only to LCD devices but also Electroluminescent Displays (Paragraph 0062). Further the sealing of a front substrate to a back substrate is equally important in both arts. Babuka discloses that the seals are not used exclusively to contain the Liquid Crystal but also hermetically seal the device and help prevent moisture penetration (Paragraph 0066). Further, while Babuka teaches the selective etching of a polyimide layer used to orientate Liquid Crystal Molecules, this is not specific to the teaching of enhancing adhesion between the two plates. One of ordinary skill in the art would recognize that were the invention applied to an EL device, the layers selectively etched would differ according to the layers of the device between a first and second substrate in the sealing region. As only the teaching of using selective etching to enhance adhesion between substrates in flat panel device is relied upon by the examiner, the art is deemed analogous and the current rejection is maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Contact Information

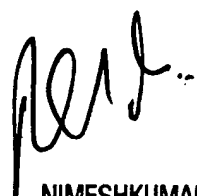
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt P Hodges whose telephone number is (571) 272-2454. The examiner can normally be reached on 7:30 AM to 4:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mph 


NIMESHKUMAR D. PATEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800